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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,971	03/14/2000	David B Parlour	X-607 US	8836
24309	7590	03/08/2004	EXAMINER	
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			LIPMAN, JACOB	
			ART UNIT	PAPER NUMBER
			2134	
DATE MAILED: 03/08/2004				

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Please find below and/or attached an Office communication concerning this application or proceeding.

hm

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/524,971	PARLOUR ET AL.	
	Examiner Jacob Lipman	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 January 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 22-28 is/are allowed.

6)  Claim(s) 1-21 and 29 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings corrections were received on 1/5/2004. These corrections are acceptable.

### ***Specification***

2. The specification corrections were received on 1/5/2004. These corrections are acceptable.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claim 20 is rejected under 35 U.S.C. 102(a) as being anticipated by Erickson et al., US Patent number 5,970,142.

With regard to claim 20, Erickson discloses a PLD (column 1 line 63), which is inherently non-volatile, that receives an encrypted configuration bit stream (column 1 line 66-column 2 line 1), including a key (column 1 lines 63), a decryptor that decrypts a part of the bit stream using the key (column 2 lines 1-3), and configures elements with the configuration data from the bit stream (column2 lines 4-5).

With regard to claim 21, encrypted data inherently has indication of what key was used to encrypt it, since it can be decrypted with that key.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson.

With regard to claims 1, and 2, Erickson discloses a method of configuring a PLD with an encrypted bit stream as outlined above. Erickson does not disclose using a unique private key to decrypt an encrypted key to decrypt the bit stream, but mentions generating a key. The examiner takes official notice that public/private key encryption is often used to transmit session keys. It would have been obvious for one of ordinary skill in the art to send an encrypted key to the PLD, rather than have the PLD create it's own key, so each PLD wouldn't need to have it's own random number generator, thus lowering costs, which Erickson teaches to be desirable (column 7 lines 42-43).

With regard to claim 3, encrypted data inherently has indication of what key was used to encrypt it, since it can be decrypted with that key.

With regard to claims 4 and 5, inherent to public/private key encryption is that the key would have to be stored.

With regard to claim 6, Erickson discloses a decryptor on the PLD (column 7 lines 36-37).

With regard to claims 7, 8, and 9, Erickson discloses sending a second bit stream with a second key (column 2 lines 9-17).

With regard to claims 11-16, the examiner takes official notice that these are obvious variations of Erickson's invention as disclosed above, would have been obvious to one of ordinary skill in the art, and will not be addressed individually.

With regard to claim 17, the examiner takes official notice that licenses are common in computers to prevent piracy. It would have been obvious to one of ordinary skill in the art to require PLD users to acquire a license before configuring the PLD, the motivation being to prevent piracy and increase sales.

7. Claims 10, 19, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Redman et al., US Patent number 5,987,476 in view of Erickson.

With regard to claims 10 and 19, Redman discloses a PLD to realize an IP module (column 2 lines 29-59). Redman does not disclose configuring the PLD with an encrypted bit stream. Erickson teaches configuring a PLD with an encrypted bit stream, as outlined above. It would have been obvious to one of ordinary skill in the art to configure Redman's PLD with Erickson's encrypted bit stream, for the motivation of controlling how the PLD can be configured.

With regard to claim 29, Erickson discloses sending a second bit stream with a second key (column 2 lines 9-17).

***Allowable Subject Matter***

8. Claims 22-28 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 703-305-

0716. The examiner can normally be reached on 7:30 - 5 M-Th, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL



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